INPUT
1953 Gallows Road, Suite 560, Vienna VA 22182 (703) 847-6870
Fax (703) 847-6872

FACSIMILE TRANSMITTAL FORM

Date: May 2, 1990
Destination: Mt. View
ATTENTION: ANDREA JERIS
Telephone Number:
Facsimile Number: 415-961-3966.

From: DOUG WILDER
Number of Pages: 1 of 4
Confidential: Yes ____ No ____
Urgent: (Yes) ____ No ____
Description: ANDREA, ATTACHED ARE 3 CHART CHANGES FOR JJSEM. THEY ARE chart No's JJSEM1-4, JJSEM-DRW4-10 AND JJSEM-DRW4-21. THE BOOK FOR JAPAN SHOULD BE 4 CHARTS TO A PAGE AND IN THE FOLLOWING SEQUENCE,
1. SYSTEMS INTEGRATION - JJSEM-1 THRU JJSEM1-25
2. NETWORK INTEGRATION - JJSEM-2-1 THRU JJSEM-2-29.
3. IMAGE PROCESSING - JJSEM-DRW4-1 THRU JJSEM-DRW4-
4. PROGRAM MANAGEMENT - JJSEM4-1 THRU JJSEM4-67

DOUG

INPUT Project Charge Code: ____
File: —
Chron: —
Contact: —
Other: — (specify) ____

INPUT

1953 Gallows Road, Suite 560, Vienna VA 22182 (703) 847-6870
Fax (703) 847-6872

FACSIMILE TRANSMITTAL FORM

Date: 5/4/90

Destination: M, V,

ATTENTION: ANDREA

Telephone Number:

Facsimile Number:

From: JOHN E. FRANK

Number of Pages: 1 of 3

Confidential: Yes_____ No ✓

Urgent: Yes_____ No ✓

Description: DESPITE ALL OUR "CARE AND ATTENTION", WE MISSED TWO CHARTS IN THE ORIGINAL DRAFTS — PLEASE MAKE 2 REPLACING SLIDES & MASTER B&W PRINTS AND RETURN ASAP (NEED FOR 5/10 BKFST).

INPUT Project Charge Code:_____
File:
Chron:
Contact:
Other: (specify)_____

Leading Systems Integration Vendors
Vertical Industry Penetration

Vendor	Number of Industries
IBM	13
EDS/GM	10
Andersen Consulting	9
CSC	7
SHL Systemhouse	6

INPUT
SIIRC-JEF-35

Same as JJSEM1-20

Notes

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Leading Systems Integration Vendors
Vertical Industry Penetration

Vendor	~~Share (Percent)~~ Number of Industries
AT&T	6
Unisys	5
BCS	5
DEC	5

INPUT
SIIRC-JEF-36

SAME AS JJ EXHIBIT I-21

Notes

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Network Integration

A Growing Opportunity

INPUT

Contents

- Definitions
- Business drivers
- Technology trends
- Market forecast
- Vendors
- Summary

INPUT
JJSEM-2-2

Notes

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Definitions

INPUT
JJSEM-2-3

Notes

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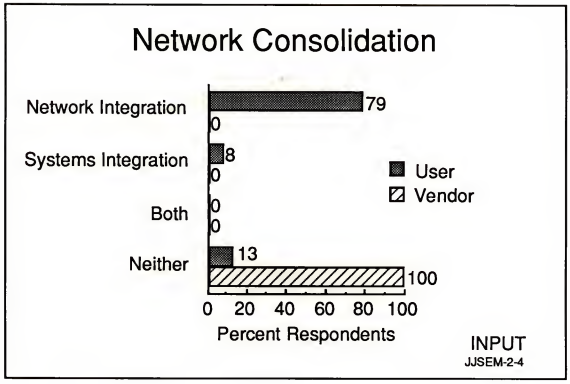

Notes

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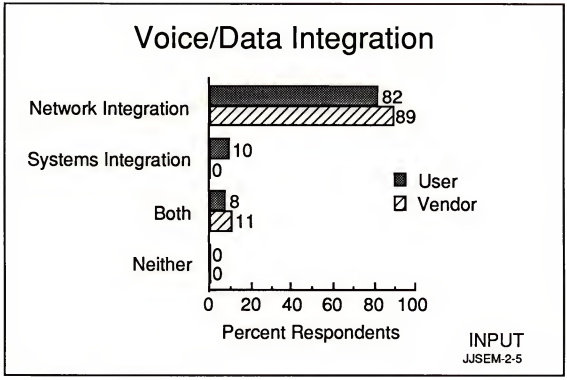

Notes

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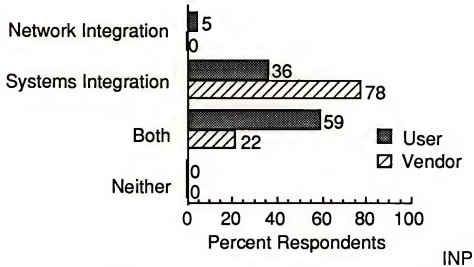
Voice/Data/Application Integration



INPUT

JJSEM-2-6

Notes

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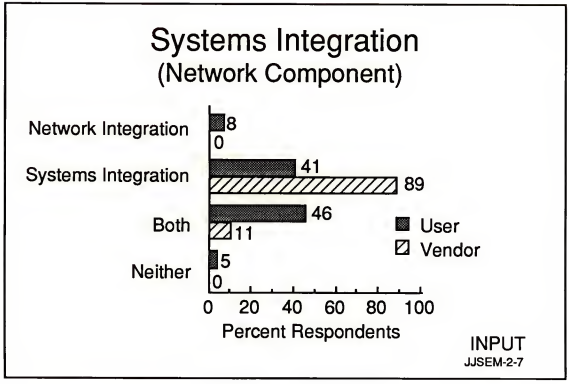

Notes

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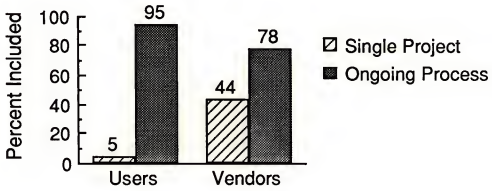
Is NI a Process or a Project?



Data totals more than 100% due to multiple responses

INPUT
JJSEM-2-8

Notes

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Business Development

INPUT
JJSEM-2-9

Notes

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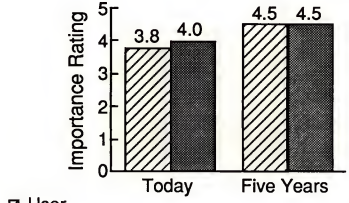
Importance of Network Integration



INPUT
JJSEM-2-10

Notes

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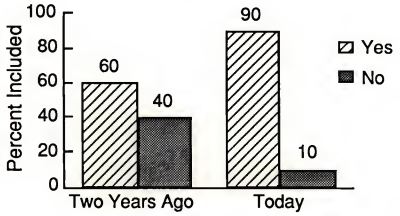
Network Integration and Information Services Strategic Plan



INPUT
JJSEM-2-11

Notes

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Network Integration Business Trends

- Increasing complexity
- Organization downsizing
- Global competitiveness
- Strategic positioning

INPUT
JJSEM-2-12

Notes

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Technology Trends

INPUT
JJSEM-2-13

Notes

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Network Integration Technology Trends

- Robust public networks
- Virtual network capability
- Enhanced value-added networks
- Increased PBX functionality
- Enhanced local-area networks

INPUT
JJSEM-2-14

Notes

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Network Integration Technology Trends

- Intelligent multiplexers
- RDBMSs
- Distributed processing
- PC/Workstation growth

INPUT
JJSEM-2-15

Notes

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Market Forecast

INPUT
JJSEM-2-16

Notes

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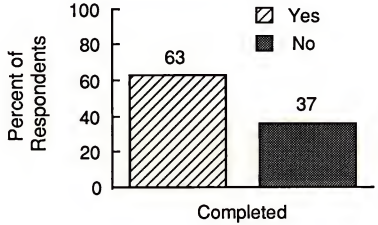
Network Integration Users Completed Projects



INPUT
JJSEM-2-17

Notes

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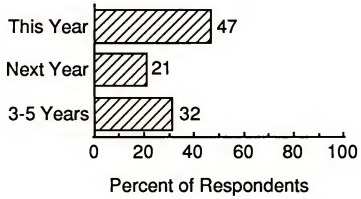
Network Integration Users
Planned Projects



INPUT
JJSEM-2-18

Notes

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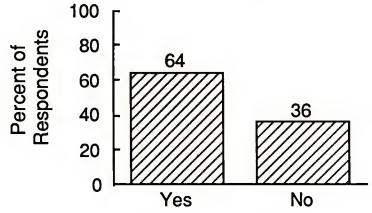
Users That Would Consider Contracting



INPUT
JJSEM-2-19

Notes

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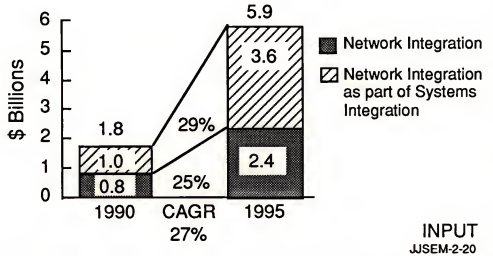
Commercial Network Integration Expenditures, 1990-1995



Notes

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Vendors

INPUT
JJSEM-2-21

Notes

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Primary Vendors' Capabilities

- Multivendor connectivity
- Ongoing support
- Network management
- Customer knowledge
- Prior experience
- Organizational stability

INPUT
JJSEM-2-22

Notes

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Network Integration
Leading Vendors

- IBM
- AT&T
- DEC
- Novell
- 3Com

INPUT
JJSEM-2-23

Notes

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Summary

INPUT
JJSEM-2-24

Notes

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Driving Forces in Network Integration

- Business requirements
- LAN integration
- Network management tools
- ISDN services
- Reduced costs

INPUT
JJSEM-2-25

Notes

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Network Integration Inhibiting Factors

- Need expertise in-house
- Vendors lack skills
- Vendors don't know business
- Better quality in-house
- Too important to contract

INPUT
JJSEM-2-26

Notes

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Conclusions

- Integrated networks important
- NI/SI labels not important
- Network integration a process
- Total integration not possible
- Local-area/office networks need integrating

INPUT
JJSEM-2-27

Notes

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Conclusions

- Few vendors are network integrators
- Support necessary
- Multivendor expertise necessary
- Organizational knowledge necessary

INPUT
JJSEM-2-28

Notes

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Recommendations

- Focus on platform integration
- Understand the end user
- Understand information flow
- Provide network support

INPUT
JJSEM-2-29

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Japan Presentation
Section 2

~~JSEM-DRW3~~

JJSEM-2

Network Integration

A Growing Opportunity

INPUT
SIIRC-AG-1

#1

Contents

- Definitions
- Business drivers
- Technology trends
- Market forecast
- ~~Vendors~~ STET
- Summary

INPUT
SIIRC-AG-2

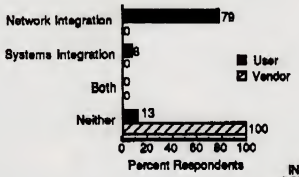
#2

Definitions

INPUT
SIIRC-AG-3

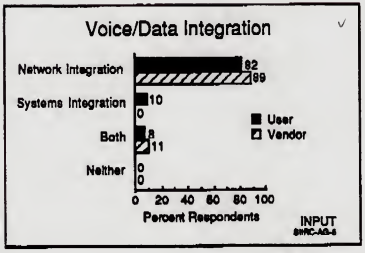
#3

Network Consolidation



INPUT
SIIRC-AG-4

#4



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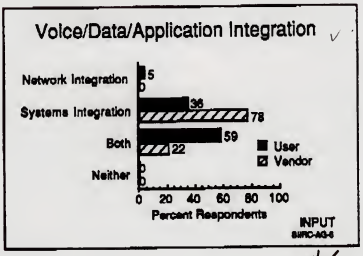

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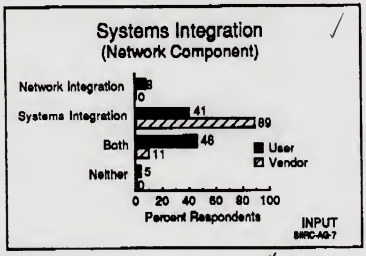
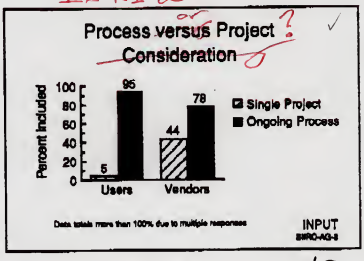


#7

Is NI a or ?



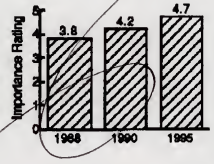
#8

Business Development

INPUT
SMRC-AG-9

#9

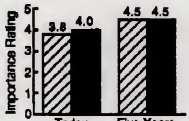
Network Importance to Business



INPUT
SMRC-AG-10

#10

Importance of Network Integration

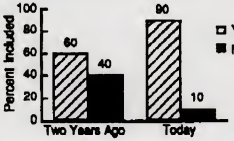


□ User
■ Vendor

INPUT
SMRC-AG-11

#10

Network Integration and Information Services Strategic Plan



INPUT
SMRC-AG-12

11

Network Integration Business Trends

- Increasing complexity
- Organization downsizing
- Global competitiveness
- Strategic positioning

INPUT
SWRC-AG-13

#12

Technology Trends

INPUT
SWRC-AG-14

#13

Network Integration Technology Trends

- Robust public networks
- Virtual network capability
- Enhanced value-added networks
- Increased PBX functionality
- Enhanced local-area networks

INPUT
SWRC-AG-15

#14

Network Integration Technology Trends

- Intelligent multiplexers
- RDBMSs
- Distributed processing
- PC/Workstation growth

INPUT
SWRC-AG-16

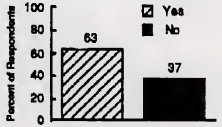
#15

Market Forecast

INPUT
SIRC-AG-17

#16

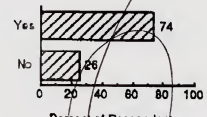
Network Integration Users Completed Projects



INPUT
SIRC-AG-18

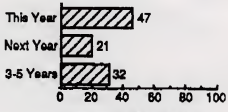
#17

Network Integration Users Planned Projects



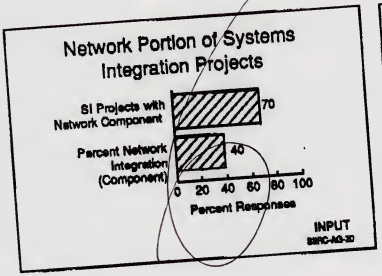
INPUT
SIRC-AG-19a

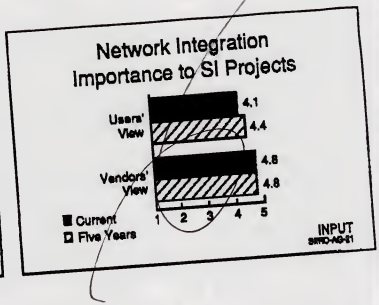
Network Integration Users Planned Projects

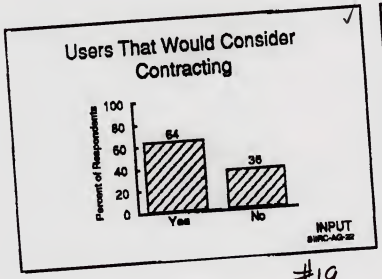


INPUT
SIRC-AG-19b

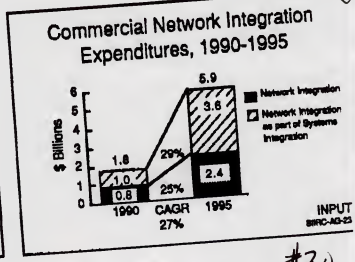
#18


Network Portion of Systems Integration Projects
SI Projects with Network Component
70
Percent Network Integration (Component)
40
0 20 40 60 80 100
Percent Responses
INPUT
SIRC-AG-20


Network Integration Importance to SI Projects
Users' View
4.1
4.4
Vendors' View
4.8
4.8
Current
Five Years
1 2 3 4 5
INPUT
SIRC-AG-21


Users That Would Consider Contracting
Percent of Respondents
100
80
60
40
20
0
64
36
Yes
No
INPUT
SIRC-AG-22

#19


Commercial Network Integration Expenditures, 1990-1995
$ Billions
6
5
4
3
2
1
0
1.8
1.0
0.8
5.9
3.5
2.4
29%
25%
1990
CAGR 27%
1995
Network Integration
Network Integration as part of Systems Integration
INPUT
SIRC-AG-23

#20

Network Integration Services Leading Industry Sectors

Sector	Rank
Banking/Finance	1
Manufacturing	2
State/Local Govt.	3
Retail Distribution	4

Vendors

#21

Primary Vendors' Capabilities

- Multivendor connectivity
- Ongoing support
- Network management
- Customer knowledge
- Prior experience
- Organizational stability

#22

Network Integration Leading Vendors

- IBM
- AT&T
- DEC
- Novell
- 3Com

#23

Summary

#24

Driving Forces in Network Integration

- Business requirements
- LAN integration
- Network management tools
- ISDN services
- Reduced costs

#25

Network Integration Inhibiting Factors

- Need expertise in-house
- Vendors lack skills
- Vendors don't know business
- Better quality in-house
- Too important to contract

#26

Conclusions

- Integrated networks important
- NI/SI labels not important
- Network integration a process
- Total integration not possible
- Local-area/office networks need integrating

#27

Conclusions

- Few vendors are network integrators
- Support necessary
- Multivendor expertise necessary
- Organizational knowledge necessary

#28

Recommendations

- Focus on platform integration
- Understand the end user
- Understand information flow
- Provide network support

#29